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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,668	10/17/2003	Gregg L. Shetty	TN-3305	2621
7590 Black & Decker Inc. 701 E. Joppa Road, TW-199 Towson, MD 21286		01/12/2012		
EXAMINER				
LEE, LAURA MICHELLE				
ART UNIT		PAPER NUMBER		
3724				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/688,668

Applicant(s)

SHEDDY ET AL.

Examiner

LAURA LEE

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1, 3, 5, 66-69, 71, 80, 81 and 87 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1, 3, 5, 66-69, 71, 80 and 81 is/are rejected.
- 8) ☒ Claim(s) 87 is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-886)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/16/2011 has been entered. Currently, claims 1, 3, 5, 66-69, 71, 80, 81, and 87 are pending, claim 87 is new, and claims 1, 66, and 67, are amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 67, 69, 80, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further view of Rafalow (U.S. Patent 4,660,450) and Steinman (U.S. Patent 3,727,502) and Smith et al. (U.S. Patent 6,347,624), herein referred to as Smith. Tsao discloses a saw (fig. 10) comprising: a base (21); a frame assembly (22) disposed on the base; a first rail (224) disposed on the frame assembly, the first rail having a

longitudinal axis and being adjustable relative to the frame in a direction lateral to the longitudinal axis (col. 2, lines 7-12); a saw assembly (24'/26) disposed on at least one of the base and the frame assembly; the saw assembly comprising a support assembly (225), a motor assembly (24') supported by the support assembly (25'/225; fig. 10), and a cutting wheel (26) driven by the motor assembly, the cutting wheel having a plane substantially parallel to the pivot axis; a table (23) slidingly disposed on the first rail, so as to be movable relative to the saw assembly in a direction substantially parallel to the longitudinal axis; and a switch (256; fig. 9) electrically connected to the motor assembly (24) and disposed above the table and proximate to the motor assembly; where the rail has a first end, and the table (23) is movable beyond the first end (at least partially).

Tsao does not disclose that the motor assembly is pivotally supported by the support assembly (225/25'), the support assembly remaining stationary relative to pivotal movement of the motor assembly and the motor assembly being pivotable, about a pivot axis substantially parallel to the longitudinal axis nor that the at least one set of table wheels are movable beyond the first end.

The first claim limitations read on a motor assembly that is pivotable to create bevel cuts in the workpiece, and the support assembly is stationary during the movement of the saw blade. Attention is directed to the Greenland tile saw. Greenland discloses an alternative configuration for the saw assembly, in which the saw assembly is positioned on a U-shaped frame, such that the saw and the motor assembly are pivotable in order to position the blade to make bevel cuts in the workpiece. Bevel cuts are well known in the cutting arts for chamfering and angular cutting of the workpiece for

example for fitting tile pieces about corners and other not 180-degree surfaces. It would have been obvious to one having ordinary skill in the art at the time of the invention to have substituted or modified the cutting assembly of Lee for the cutting assembly of Greenland to allow for movement of the saw blade relative to the support assembly as taught by Greenland for the similar benefit of increasing the versatility of the cutting tool by allowing for angular cuts to be created in the workpiece.

Tsao also does not disclose that the table is slidably disposed on the first rail through at least one set of wheels mounted to an underside thereof that are movable beyond the first end. However, attention is also directed to both the Steinman, Rafalow and Smith references. Both Steinman and Rafalow disclose saw guides with adjustable rail systems that allow the saw blade assembly as similar to the Tsao table to be slid along the rails. Steinman discloses a first rail system where the rails are adjustable to accommodate varying sized saw assemblies. The assemblies are slidable along the rails by rollers (39). The rollers are confined at the end of the rails so that they cannot move beyond the ends of the rails. Alternatively, Rafalow discloses an adjustable rail system for also accommodating varying sizes saw assemblies that are movable along the rails via a wheel or roller members. However, Rafalow discloses that the saw assemblies are not constrained at the end of the rails and that the rails are instead open ended to permit easy placing of the power saw thereupon. Furthermore, attention is also directed to the Smith table saw. Smith discloses an alternative table assembly that is slidable along a set of rails, where the table assembly is movable beyond the end of the rails. However, Smith does not disclose that the rails are adjustable. In considering

the state of the art at the time of the invention and that it was known to make the rails both adjustable and open ended as shown by Tsao and Smith and as shown by both Steinman and Rafalow in alternative rail systems to make adjustable rail systems both open and constrained at the ends, it would have been obvious to one having ordinary skill in the art to have utilized an alternative rail system such as shown by Rafalow with a table with rollers or wheels as shown by Rafalow, Smith and Steinman on the Tsao table saw, to allow for easier placement and removal of the table on the rails. Furthermore, all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

In regards to claim 2, the modified device of Tsao discloses wherein the table (17) is movable beyond the base (11).

In regards to claim 67, the modified device of Tsao discloses a saw (fig. 10) comprising a base (21); a frame assembly (22) disposed on the base (21); a first rail (224) disposed on the frame assembly, the first rail (224) having a longitudinal axis and being adjustable relative to the frame in a direction lateral to the longitudinal axis (col. 2, lines 7-12); a table (23) slidably disposed on the first rail through at least one set of wheels (as modified) mounted to an underside thereof, the table being movable in a direction substantially parallel to the longitudinal axis; a saw assembly (24'/26) disposed on at least one of the base and the frame assembly, the saw assembly comprising, a support assembly (25'/225), a motor assembly (24') pivotably supported

(as modified by Greenland) by the support assembly (25'/225), the motor assembly being pivotable about a bevel axis substantially parallel to the longitudinal axis (as modified), and a cutting wheel (26) driven by the motor assembly(24'), the cutting wheel (26) having a plane substantially parallel to the bevel axis; and a switch (257') electrically connected to the motor assembly (24) and disposed on the support assembly (25'), so that when the motor assembly is pivoted about the bevel axis, the switch remains stationary (as rendered possible from the wire as similarly disclosed by Greenland), wherein the support assembly comprises a support member (225) disposed on at least one of the base (21) and the frame (22) assembly, and a generally U-shaped member (25' the housing is considered U-shaped) coupled to the support member (225), the switch (257') being disposed on the generally U-shaped member, wherein the first rail has a first end, and the table and the at least one set of wheels are movable beyond the first end (as modified).

In regards to claim 80, the modified device of Tsao discloses wherein the support assembly (225/25') comprises a support member (225) disposed on at least one of the base (21) and frame (22) assembly, a generally U-shaped member (25'; the motor housing is consider U-shaped) coupled to the support member, the switch (257') being disposed on the generally U shaped member.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further

view of Rafalow (U.S. Patent 4,660,450) and Steinman (U.S. Patent 3,727,502) and Smith et al. (U.S. Patent 6,347,624), herein referred to as Smith.

In regards to claim 3, the modified device of Tsao discloses the claimed invention except that the frame assembly is made of aluminum. Although it is well known in the art to select a material based upon its suitability, attention is again directed to the Smith tile saw which also discloses that the frame is comprised of aluminum. It similarly would have been obvious to one having ordinary skill in the art to have utilized aluminum for the frame assembly as taught by Smith on the Tsao frame assembly, as aluminum is well known for its high strength, yet light weight properties.

5. Claim 69 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further view of Rafalow (U.S. Patent 4,660,450) and Steinman (U.S. Patent 3,727,502) and Smith et al. (U.S. Patent 6,347,624), herein referred to as Smith and in further view of McCambridge et al. (U. S. Patent 4,350,193), herein referred to as McCambridge, Marcoux et al. (U.S. Patent 3,342,226), Brenta (U.S. Patent 4,105,055), Sanfillipo (U.S. Patent 6,745,803) and Otto (U.S. Patent 5,161,590). The modified device of Tsao discloses the use of an electrical plug to power the saw from a wall outlet, but not disclose that the end of the plug/cord is instead terminated at an electrical outlet. However, attention is directed to the McCambridge, Marcoux, Brenta, Sanfillip and Otto reference that all discloses work tables with directly incorporated outlets. These references are cited as cumulative evidence that it is well known in the art to utilize an

outlet on a worktable such as shown by Greenland instead of directly engaging the power tool with an AC wall outlet. The outlets provide available and convenient electrical power for utilization with a plurality of tools at the same time, such that only a single cord is required to run to the wall outlet, instead of two cords to operate both the pump and the motor of the saw. It similarly would have been obvious to one having ordinary skill in the art to have incorporated an outlet into the Tsao support instead of the plug as taught by McCambridge, Marcoux, Brenta, Sanfillip and Otto to minimize the number of cords to power the pump and saw motor plugged into a wall outlet or to power additional tool attachments.

6. Claim 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further view of Rafalow (U.S. Patent 4,660,450) and Steinman (U.S. Patent 3,727,502) and Smith et al. (U.S. Patent 6,347,624), herein referred to as Smith and in further view of Sigetich et al. (U.S. Patent 4,428,159), herein referred to as Sigetich. The modified device of Tsao discloses the claimed invention except is silent as to the type of switch and therefore does not appear to disclose that the switch comprises a single throw, double pole switch (i.e. a toggle switch). However, attention is directed to the Sigetich tile saw cutter which utilizes a toggle switch (51) to energize and de-energize the motor 31 and the pump 53 at the same time. As toggle switches are old and well known in the art for providing on/off connections, it would have been obvious to one having ordinary

skill in the art to have utilized a toggle switch in the modified device of Tsao to turning the power on/off.

7. Claims 66, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further view of Rafalow (U.S. Patent 4,660,450) and Steinman (U.S. Patent 3,727,502) and Smith et al. (U.S. Patent 6,347,624), herein referred to as Smith. Claims 66 and 67, 68 are rejected as set forth in the rejection of claim 1 above. Furthermore, the modified device of Tsao does not disclose that the U-shaped member has a first and second leg with the switch disposed on the U-shaped member and the motor assembly pivotally supported by the first and second legs.

In regards to claims 66, 67 and 68, as was previously set forth in the rejection of claim 1, attention is directed to the Greenland tile saw. Greenland discloses an alternative configuration for the saw assembly, in which the saw assembly is positioned on a U-shaped frame, such that the saw and the motor assembly are pivotable in order to position the blade to make bevel cuts in the workpiece. Bevel cuts are well known in the cutting arts for chamfering and angular cutting of the workpiece for example for fitting tile pieces about corners and other not 180-degree surfaces. It would have been obvious to one having ordinary skill in the art at the time of the invention to have substituted or modified the cutting assembly of Lee for the cutting assembly of Greenland to allow for movement of the saw blade relative to the support assembly as

taught by Greenland for the similar benefit of increasing the versatility of the cutting tool by allowing for angular cuts to be created in the workpiece.

Tsao also discloses that there is a switch 537' provided on the housing 25' with power wires coming into and out of the housing as similarly provided for by Greenland (fig. 3). Therefore as shown by Greenland to have a pivoting motor with extending wires and as taught by Tsao to have a motor separate from the housing with a switch at the end of the wires, and as it is well known to provide additional slack in wires to allow them to be non-constraining, it would have been obvious to one having ordinary skill in the art to have left the switch on the stationary part of the housing as a matter of design choice dependent on the suitability of that location for whatever desired reason, such as dexterity, eye coordination, or standing position of the operator, ease of manufacturing, or position of the work piece and/or product.

8. Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsao (U.S. Patent 6,263,866) in view of Greenland (U.S. Patent 6,276,990) and in further view of Rafalow (U.S. Patent 4,660,450) and Steinman (U.S. Patent 3,727,502) and Smith et al. (U.S. Patent 6,347,624), herein referred to as Smith and in further view of Sigetich et al. (U.S. Patent 4,428,159), herein referred to as Sigetich. The modified device of Tsao discloses the claimed invention except is silent as to the type of switch and therefore does not appear to disclose that the switch comprises a single throw, double pole switch (i.e. a toggle switch). However, attention is directed to the Sigetich tile saw cutter which utilizes a toggle switch (51) to energize and de-energize the motor

31 and the pump 53 at the same time. As toggle switches are old and well known in the art for providing on/off connections, it would have been obvious to one having ordinary skill in the art to have utilized a toggle switch in the modified device of Tsao to turning the power on/off.

Allowable Subject Matter

9. Claim 87 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3, 5, 66-69, 71, 80, and 81 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/
Primary Examiner, Art Unit 3724